

Technical Service Bulletin



91 GPS reception complaints: Troubleshooting connector issues

91 14 52 2037756/1 July 22, 2014.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A4, A5, A6, A7, A8, Q7	2013-2014	All	MMI Navigation
A3	2015	All	MMI Navigation

Condition

- The customer complains about GPS navigation issues that may be antenna-related.
- No DTC entry is logged.



Note:

This bulletin should be performed before any other bulletins that cover specific customer complaints.

Technical Background

If the GPS antenna cable became partially connected during assembly or during a repair, it may still function. But, the partially-connected cable can cause an intermittent issue that does not cause a DTC to be logged.

Production Solution

Improved wiring assembly production process implemented.

Service

This bulletin is for information only and will help aid in the troubleshooting of potential GPS performance issues related to the coax cable connection that runs from the GPS antenna to the MMI main unit.

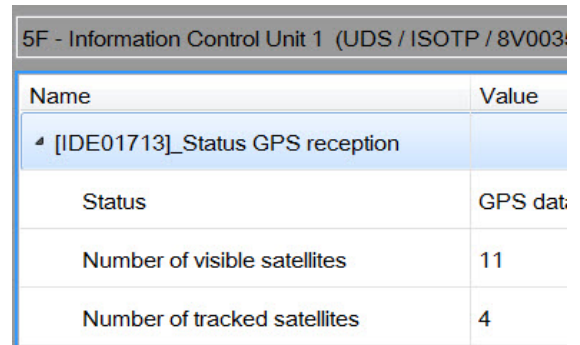
1. Park the vehicle outside to ensure sufficient satellite reception.
2. Connect an ODIS diagnostic tester and start the self-diagnosis:
Start Diagnosis >> Uncheck "Use Guided Fault Finding" >> Control Modules >> 5F-Information electronics 1 >> Right Click or Long Press to Identify Control Module >> Control module OBD >> Read Measured Value Block
3. **For MMI 3G+:**
Select the measured value blocks 97.1 and 97.2. The display shows the current value of the received or used satellites:

- MVB 97.2 indicates the satellites that are currently being used by the main unit for tracking the vehicle's current position.
- MVB 97.1 indicates the number of recognized satellites, but the identification of these satellites is not confirmed, therefore they are not used in determining the vehicle's current position.

For MMI MIB:

Search for the keyword "GPS" and select "Status GPS reception". Within this MVB, the sub-values of "Number of visible satellites" and "Number of tracked satellites" will be viewable (Figure 1):

- "Number of visible satellites" is the number of unconfirmed satellites that are not used for positioning the vehicle.
- "Number of tracked satellites" is the number of satellites currently being used for positioning the vehicle.



Name	Value
▾ [IDE01713]_Status GPS reception	
Status	GPS dat
Number of visible satellites	11
Number of tracked satellites	4

Figure 1. MVB "Status GPS reception".

4. Move the connector on the back of the MMI main unit (Figure 2) and observe whether the value of the two MVBs change on the display:
 - If the value of 97.2/"Number of tracked satellites" drops below 3, proceed to step 5.
 - If there is no change in the number of satellites, proceed to step 7.

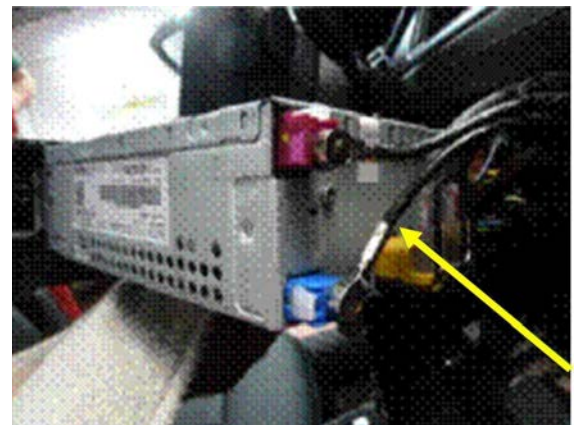


Figure 2. Blue FAKRA connector for GPS

5. Inspect the blue connector for damage at the coax terminal (Figure 3). If damage is found, replace the coax cable from the antenna to the MMI main unit.

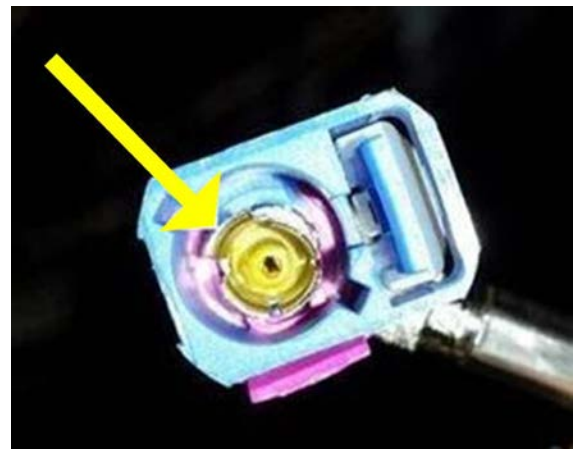


Figure 3. Coax terminal damage

Technical Service Bulletin



6. Inspect the connector locking tab for damage (Figure 4). If damage is found, replace only the connector housing for the damaged end of the coax cable.

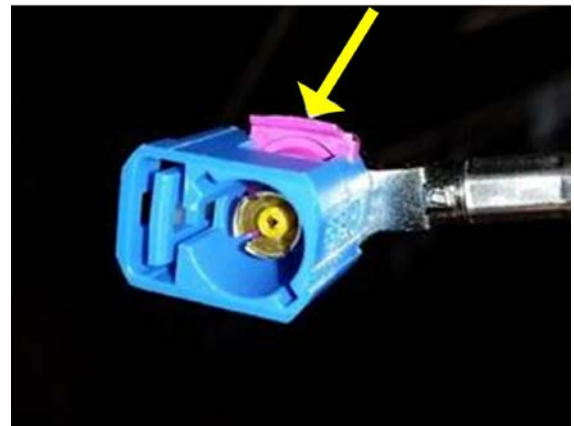


Figure 4. FAKRA connector lock

7. Access the GPS antenna connectors (Figure 5). Move the connector on the GPS aerial and observe the MVBs for the GPS antenna (97.1/97.2).
If the value of 97.2/"Number of tracked satellites" drops under 3, check that the connector on the GPS aerial is correctly plugged-in and that there is no damage on the connector housing.



Figure 5. Blue FAKRA connector for GPS

8. If no damage is found to any of the connectors and the results of the wiggle test with MVBs is inconclusive, continue with other applicable GPS-related bulletins or contact TAC for further assistance.

Warranty

This TSB is informational only and not applicable to any Audi warranty.

Additional Information

All parts and service references provided in this TSB (2037756) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.